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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,135	02/04/2004	Arthit Sitiso	MICRON-43919	5088

26252 7590 08/30/2006

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EXAMINER

HOFFMAN, MARY C

ART UNIT	PAPER NUMBER
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3733

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/773,135	Applicant(s) SITISO ET AL.	
	Examiner Mary Hoffman	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/27/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-13,16-21 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-13,16-21 and 24-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5, 7-13, 16, 18-21, 24 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Biedermann et al. (U.S. Patent No. 6,723,100).

Biedermann et al. disclose various embodiments of a pedicle screw assembly comprising a pedicle screw having a head portion and a threaded shaft portion extending from the head portion, and a body having an aperture, a rod passageway, and oppositely threaded internal and external threads. The set screw has exterior threads for engaging the internal threads of the body and a nut having internal threads for engaging the external threads of the body. The head portion of the pedicle screw includes a rounded head, and the head and base form a spherical joint. A compression washer is disposed in the base for retaining the head of the pedicle screw within the base. The compression washer is press-fit within the base and includes a concave facet disposed above the head of the pedicle screw. The threaded portion of the pedicle screw is tapered. The assembly of pedicle screw includes a drive slot formed in the head portion. The rod passageway and the pedicle screw aperture of the body are transverse to one another. A rod extends through the rod passageway. The set screw is capable of traveling within the body and contacting the rod, securing it in place within

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the body. The set screw includes a drive slot therein for tightening by a driver device. The assembly of nut has a polygonal outer configuration. The set screw and nut are fastened in opposite directions. Biedermann et al further disclose a spinal fixation system comprising a plurality of pedicle screw assemblies, and a rod extending between the pedicle screw assemblies. The system pedicle screw includes a drive slot formed in the head portion. The compression washer defines a generally planar surface on the upper surface facing the rod assembly. A tightening device is disclosed for simultaneously tightening the set screw and the nut, comprising a wrench with a handle, and a driver with a handle. The wrench has a shaft and socket, and the driver has a shaft slidably extending through the wrench. The driver has a driver end. (See marked-up figures below).

With regard to statements of intended use and other functional statements, i.e. "configured to", "for use", etc., they do not impose any structural limitations on the claims distinguishable over Biedermann et al., which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the law of anticipation does not require that the reference "teach" what the subject patent teaches, but rather it is only necessary that the claims under attack "read on" something in the reference. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781 (CCPA 1983). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 17, 20, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biedermann et al. (U.S. Patent No. 6,723,100) in view of Halm et al. (U.S. Patent No. 5,738,685).

Biedermann et al. disclose the claimed invention except for a major diameter of the threaded portion being generally constant, and a minor diameter of the threaded portion being tapered, and the shank portion is approximately the diameter of the constant major diameter.

Halm et al. disclose a bone screw having a major diameter of the threaded portion being generally constant, and a minor diameter of the threaded portion being tapered and the shank portion is "approximately" the diameter of the constant major diameter to obtain a clamping effect by means of which the bone screw is additionally held in the bone (col. 3, paragraph 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the bone screw of Biedermann et al. with a major diameter of the threaded portion being generally constant, and a minor diameter of the threaded portion being tapered, and the shank portion is approximately the diameter of

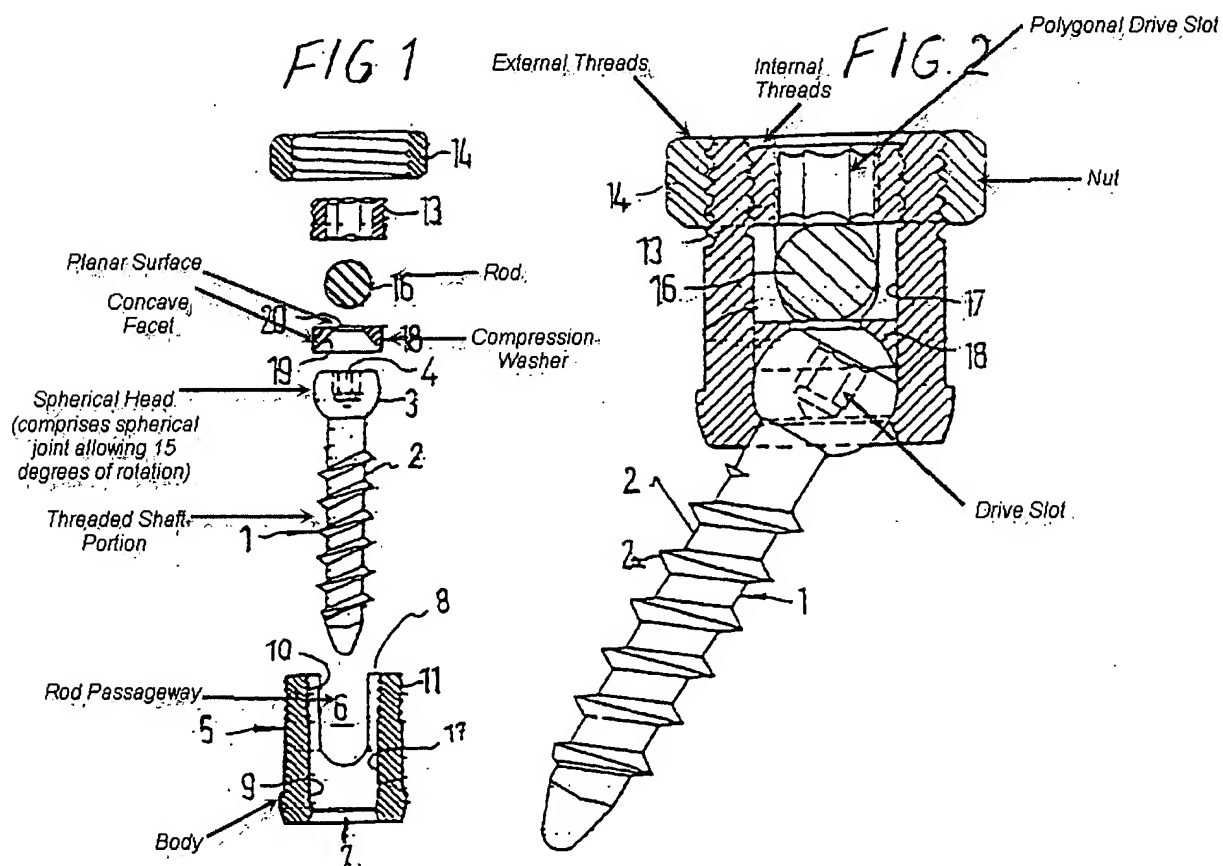
the constant major diameter in view of Halm et al. in order to obtain additional means of holding the bone screw in the bone.

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Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

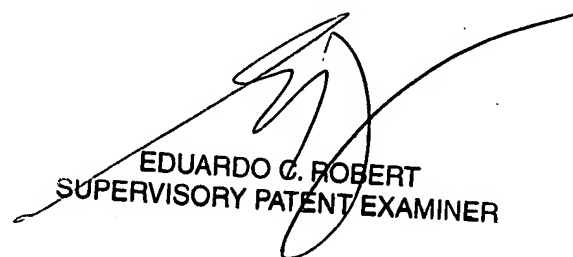
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Hoffman whose telephone number is 571-272-5566. The examiner can normally be reached on Monday-Friday 9:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo C. Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCH



EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER